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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,715	01/28/2005	Karl Haberle	264519US0PCT	7463
22850	7590	11/02/2006		
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER NILAND, PATRICK DENNIS	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/522,715

Applicant(s)

HABERLE ET AL.

Examiner

Patrick D. Niland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/8/06 has been entered.

The amendment of 8/8/06 has been entered. Claims 1 and 5-21 are pending.

2. Claims 1 and 5-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The instant claims recite percentages by weight. However, it is unclear if these percentages by weight are based on the entire composition, including additional ingredients encompassed by "comprising" or if they are only based on the recited components A, B, and C.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 5-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of US Pat. No. 6472493 Huynh-Ba and US Pat. No. 4663377 Hombach et al. in view of US Pat. No. 6426414 Laas.

Huynh-Ba discloses that it has been known to use the combination of the instantly claimed isocyanurates for the benefits disclosed at column 1, lines 51-56 and discloses the relative

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amounts of HDI and IPDI trimers of the instant claims at column 3, lines 9-16. Huynh-Ba does not disclose emulsifiers nor aqueous dispersions of these polyisocyanate trimers.

Hombach discloses aqueous emulsions of polyisocyanates reacted with emulsifiers which fall within the scope of those of the instant claims and amounts thereof, including trimers of HDI and IPDI. See the abstract; column 2, lines 1-68, particularly 13-22 and 26-44 of which 39-68 is particularly noted; column 3, lines 1-68; column 4, lines 1-68, particularly 6-11 which encompasses using the above isocyanurates to make the claimed emulsifier, and 13-45 of which lines 37-45 reacts the polyisocyanates with the instantly claimed emulsifier compound having an NCO reactive group and a hydrophilic group in amounts which encompass those of the instant claims; column 5, lines 7-68; column 6, lines 1-44; and the remainder of the document particularly claims 4-5. Bonding requires coating.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the combinations of HDI and IPDI trimers of Huynh-Ba and the amounts thereof which fall within the scope of the instant claims to obtain the balance of hardness and curing speed taught by Huynh-Ba and to use the amount of emulsifier falling within the scope of the instant claims and Hombach to make the aqueous dispersions of Hombach because Hombach broadly encompasses such compositions and they would have been expected to have the hardness/curing rate of Huynh-Ba, the benefits of aqueous compositions such as avoidance of harmful, EPA regulated, expensive organic solvents, and the emulsification taught by the compounds of column 4 of Hombach. This subcomposition meets the "consisting" requirements of claims 16 and 21.

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It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the solvents of the instant claims, including claim 7, because they are known solvents for urethanes as taught by Laas, paragraph bridging columns 6-7, and are encompassed by column 5, lines 7-10 of Hombach. "Such as" is not limiting.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the above discussed polyisocyanate component as the curing agent in any two component polyurethane aqueous dispersion typically employing such isocyanate curing agents such as those discussed by Hombach and Huynh-Ba to coat or adhere the instantly claimed substrates because they are expected to give the benefits taught by Hombach and Huynh-Ba to such coatings or adhesives and Hombach and Huynh-Ba encompass the instantly claimed substrates.

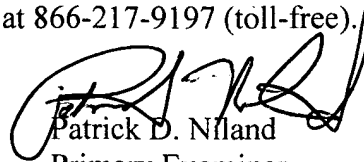
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick D. Niland
Primary Examiner
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